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Diodontus boharti, a New Species from California's North Coast Range (Hymenoptera: Sphecidae)

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Collecting trips to the more remote portions of California's Siskiyou Mountains, Marble Mountains, Salmon Trinity Mountains, and Yolla Bolly Mountains since 1965 have added more than 30,000 specimens to the insect collection at Pacific Union College, Angwin, Napa County, California. Most of the collecting expeditions involved small groups of students who, with the author, spent about ten days at a time backpacking into the higher elevations in search of insects. The North Coast Ranges of California have a unique flora that has been described as rich in narrowly endemic species which often appear to be relicts restricted to a specific ecosystem (Whittaker, 1961). We assumed that in an area so vegetatively and geologically distinctive, we would also find a characteristic insect fauna. More than 15 years of collecting in these mountains has resulted in a number of new species and new distributional records. We suspect that there are more, but large portions of the collection have not yet been determined to species and we are still looking for systematists who would be willing to determine material for us.

Determination of wasp specimens from our collections has been done mostly by Dr. Richard Bohart. My first contact with him was in connection with a new species of *Pulverro* that I discovered in the Salmon Trinity Mountains in 1966 (Eighme, 1968). I was a bit hesitant to attempt my first description and publication of a new species, but Dr. Bohart took care of that with his good natured assurance and assistance. My immediate reaction was one of confidence with such authority as he telling me I had a good species. *Pulverro monticola* Eighme has since been collected over a wide area of northern California mountains.

It was Richard Bohart who encouraged me to work on the genus *Diodontus.* I am grateful to him for introducing me to this fascinating group of wasps and I take pleasure in naming this distinctive new species in his honor.

Diodontus boharti Eighme, NEW SPECIES

Holotype male.—Black; mandibles (central portion), palps, apical ½ of pronotal lobe, spot on anterior portion of tegula, front side of all tibiae golden yellow; basal tarsomere of foreleg dusky yellow; wings dusky, iridescent, wing veins and stigma dark brown; labrum shallowly notched, clypeal teeth prominent; flagellomeres V–X with apical margins arcuate, flagellomeres VIII–X with oval, smooth, shiny tyli, flagellomere XI with small basal tylus and apical smooth shiny spot; frons and vertex with large punctures separated by less than puncture diameter, microsculpture finely linear, upper ½ of frontal line a weak carina; pronotal collar with humeral angles sharp but not produced upward; scutum with dense punctures slightly smaller than those on the head, no microsculpture, admedian lines prominent, raised and broader than the notauli which are also prominent, parapsidal lines obscure; scutellum with faint median line; propodeum coarsely reticulate

with blunt lateral spine posterad from the spiracular flange; abdomen with fine setigerous punctures connected by fine reticulated microsculpture, tergum VI with spinose tubercules on posterior margin bearing 3 spines, sternal brushes weak; basal tarsomeres straight; omaulal ridge strong, sharp, joining postspiracular carina by a lateral extension at right angle.

Allotype female.—Black; mandibles (central portion), spot on anterior portion of tegula golden yellow; palps brown; tibiae orange-brown with darker spot on posterior side; wings dusky, iridescent, wing veins and stigma black; clypeal teeth prominent, lateral teeth twice as long as medial one; frontal spine prominent but blunt, orbital foveae narrow, extending from mid-orbit to vertex; frons and vertex with widely scattered large punctures, microsculpture fine reticulation; pronotal collar with coarse longitudinal striations at crest, humeral angles slightly winged; scutum with widely scattered punctures of same size as those on vertex plus smaller punctures densely concentrated on anterior portion, admedian lines distinct, notauli faint, parapsidal lines long, distinct; scutellum punctured like posterior scutum, propodeum coarsely reticulate with blunt lateral spine; abdomen finely punctured with reticular microsculpture; omaulal carina similar to male but not as prominent; pygidium flat with lateral border of coarse white setae.

Type material.—Holotype ♂ and allotype ♀: CALIFORNIA, *Siskiyou Co.,* Bear Basin, 7000′, August 9, 1967, Lloyd Eighme, deposited at California Academy of Sciences, San Francisco. There are 21 paratypes as follows (all from California, all deposited at Pacific Union College, except as noted): *Del Norte Co.,* Stevens Camp; *Glenn Co.,* Plaskett Meadows; *Siskiyou Co.,* Rattlesnake Meadow; *Trinity Co.,* Deadfall Lakes, Mirror Lake, Red Mt. Meadows, Swift Creek (University of California, Davis), Ward Lake.

Discussion.—The coarse sculpturing of the frons and vertex is distinctive in this species. *D. boharti* resembles *D. vallicolae* in some ways but differs markedly in that it lacks the modified scutal margin seen in *D. vallicolae,* and the male has spinose tubercles on tergum VI which relate it to a different species group. Coloration may vary from the holotype in that darker specimens have no yellow on the pronotal lobe or tegula. Varying amounts of yellow pigmentation is evident in most species of this genus, so that structural characteristics have been selected as much as possible to separate the species. I originally recognized this new species from a few specimens I collected in Bear Basin, Siskiyou County in 1967. One of my students, Terry Griswold, collected 23 specimens in the Swift Creek area of Trinity County in 1972, and since then other specimens have been taken at various sites in the North Coast Range.

Literature Cited

Eighme, Lloyd E. 1968. A new species of *Pulverro* from California. Pan-Pac. Ent. 44:261–264.

Whittaker, R. H. 1961. Vegetation history of the Pacific Coast States and the "central" significance of the Klamath Region. Madroño 16(1):5–23.